Serial No. 09/000,824 Attorney Docket No. 41980.002004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of Jayantha AMARASEKERA et al. Art Unit: 1713 Serial No. 09/000,824 Examiner: C. Lu Rutt Filed: December 30, 1997 SILICONE COMPOSITIONS FOR

HIGH VOLTAGE INSULATOR **APPLICATIONS**

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Assistant Commissioner of Patents

Washington, D.C. 20231

TC 1700

AFFIDAVIT OF CORROBORATING WITNESS PURSUANT TO 37 C.F.R. 1.608

I, William (Bill) Reed declare that at a date prior to January 30, 1996, I recorded in my laboratory notebook the document reproduced as Appendix A. January 30, 1996, is a date earlier than the effective date of U.S. Patent No. 5,824,729, filed in the U.S. Patent and Trademark Office on January 30, 1997 claiming priority to JP 8-037457 filed January 30, 1996.

FACTS AND DOCUMENTARY EVIDENCE

My notebook page attached as Appendix A evidences the preparation and testing of the composition of the invention of this application prior to January 30, 1996.

Claim 17 of the application requires:

100 weight parts organopolysiloxane gum having at least 2 silicon-bonded (A) alkenyl groups in each molecule and the average compositional formula:

 $R_aSiO_{(4-a)/2}$



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in which R is selected from substituted and unsubstituted monovalent hydrocarbon groups and a has a value from 1.95 to 2.05,

- (B) 15 to 300 weight parts aluminum hydroxide powder,
- (C) 0.1 to 1 weight part of a silane treating agent, and
- (D) 0.1 to 5 weight parts of a peroxide based curing agent, wherein said silane treating agent (C) is present in an amount effective to act as a surface modifier for the aluminum hydroxide powder.

Referring to the portion of notebook page labeled as "Notebook Ref. 492-4002" presented in Appendix A, SE6035 and SE6160 are organopolysiloxane compounds in amounts of 40 parts and 60 parts, respectively, for a total of 100 parts of organopolysiloxane compound. SE6160 is a compounded methyl vinyl silicone gum containing 64.4% by weight of a methyl vinyl silicone gum and SE6035 is a compounded methyl vinyl silicone gum containing 76.3% by weight of a methyl vinyl silicone gum. As prepared, Notebook Ref. 492-4002 contained about 69 parts per hundred of methyl vinyl silicon gum, i.e. organopolysiloxane gum. The other ingredients in these two rubber compounds are fillers and processing aids and in the case of the SE6160 a small amount if a silazane cross linking agent. Hydrol 710 is aluminum hydroxide powder in an amount of 100 parts. SC3735 is a silane treating agent in an amount of 0.5 parts. A handwritten notation in the corner of this document indicates 1.8 parts of a peroxide catalyst which is a peroxide based curing agent.

The proportions as shown in Notebook Ref. 492-4002 are based on 69 wt. parts methyl vinyl silicone gum. Table I below provides a calculation for the composition of Notebook Ref. 492-4002 with values for components based on 100 wt. parts of methyl vinyl silicone gum.



| Requirements of Claim 17 | Composition as printed in Notebook Ref. 492-4002 | Calculated proportions for the composition of Notebook Reference 492-4002 based on 100 wt. parts organopolysiloxane gum |
|---|---|--|
| 100 wt. parts organopolysiloxane gum | 40 wt. parts SE6035 (76.390% methyl vinyl silicone gum) 60 wt. parts SE6160 (64.4% methyl vinyl silicone gum) e.g. total methyl vinyl silicone gum 69 wt. parts | 57.6 parts SE6035 (76.3% methyl vinyl silicone gum) 86.4 parts SE6160 (64.4% methyl vinyl silicone gum) e.g. total methyl vinyl silicone gum 100 wt. parts |
| 15-300 wt. parts aluminum hydroxide powder | 100 wt. parts aluminum hydroxide powder | 144 wt. parts aluminum hydroxide powder |
| 0.1 to 1 wt. part silane treating agent | 0.5 wt. part silane treating agent | 0.72 wt. part silane treating agent |
| 0.1 to 5 wt. parts peroxide based catalyst | 1.8 wt. parts peroxide based catalyst | 2.6 wt. parts peroxide based catalyst |

Further the notation "insulator compound for Tosil" appears at least three times on the notebook page bearing the formulation. Testing of the composition is evidenced by a signature in the blank following "Compd. Tested By" and the listing of test data provided in the lower portion of the "Notebook Ref. 492-4002" document.

I hereby declare that all statements made here and of my own knowledge are true and that statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the likes so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United



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States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE

| Full Name of Corroborating Witness: William (Bill) Reed |
|---|
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